

Notice of Allowability

Application No.

09/591,196

Examiner

Edith M Chang

Applicant(s)

OLEYNIK, VLADISLAV A.

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on Aug 03 2004.
2. ☒ The allowed claim(s) is/are 1,2,4-12,15-20 and 23-27.
3. ☒ The drawings filed on 09 June 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gregory A. Hunt on December 10, 2004.

2. The application has been amended as follows:

In the claims:

Claim 1, line 4: "received" has been changed to "received spread spectrum"; and line 11: "and" has been changed to "frequency and".

Claim 2, line 4: "received" has been changed to "received spread spectrum"; and line 16: "an" has been changed to "the".

Claim 4, line 5: "received" has been changed to "received spread spectrum"; line 20: "first power" has been changed to "first"; and lines 20-21: "intermediate frequency" has been changed to "received".

Claim 5, line 3: "(a) a" has been changed to "a"; line 4: "(b) a" has been changed to "a"; and line 6: "(c) a" has been changed to "a".

Claim 8, line 2: "(a) the" has been changed to "the"; and "comprises first" has been changed to "comprises a first"; line 4: "(b) the" has been changed to "the"; line 7: "(c) the" has

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been changed to “the”; and line 9: “phase shifter” has been changed to “regulated oscillators module”.

Claim 9, line 2: “(a)” & line 5: “(b)” has been changed to “(e)” and “(f)” respectively.

Claim 12, line 4: “a” & line 16: “an”; Claim 15, line 5 & line 16: “a” has been changed to “the”.

Claim 16, line 1: “a” has been changed to “the”; line 2: “to” has been changed to “to the frequency of” and line 3: “frequency” has been changed to “frequency signal”.

Claim 17, line 5, line 16 & line 19: “a” has been changed to “the”; lines 24 & 27: “intermediate frequency” has been changed to “frequency of the intermediate frequency signal”.

Claim 20, line 15: “an” and Claim 23, line 15: “a” has been changed to “the”.

Claim 24, line 1: “a” has been changed to “the”; and line 3: “the intermediate frequency” has been changed to “the frequency of the intermediate frequency signal”.

Claim 25, lines 15 & 18: “a” has been changed to “the”; lines 23 & 26: “intermediate frequency” has been changed to “frequency of the intermediate frequency signal”.

Claim 18 & Claim 19, line 2; Claim 26 & Claim 27, line 3: “signal” has been changed to “quadrature phase modulated spread spectrum signal”.

3. The following is an examiner’s statement of reasons for allowance:

The prior art of record fails to teach or suggest, alone or in a combination, among other things, at least a quadrature phase modulation receiver and its method as a whole, the combination of elements and features, which includes a frequency multiplier multiplying the received signal having the intermediate frequency (IF) by a fixed factor to produce a frequency

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multiplied signal characterized by the expression $(\cos(4\omega t + 4\phi))/2$ or being a 4x frequency multiplier, wherein the frequency multiplier signal outputs to a phase shifter of the means for producing an oscillator control signal to a regulated oscillators module to produce an intermediate frequency signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edith M Chang whose telephone number is 571-272-3041. The examiner can normally be reached on M-F.

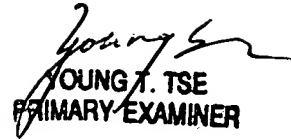
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Edith Chang
December 10, 2004


YOUNG T. TSE
PRIMARY EXAMINER